

Dholakia, Umesh

From: Dholakia, Umesh
Sent: Wednesday, September 23, 2015 10:59 AM
To: 'Ocasio, Aileen'
Cc: Esquilin, Jorge; Nunez, William E; Leimarys Delgado Medero; Angel Morales Cadiz; Frontanes, Ramon; Bonano-Umpierre, Orlando; Claudio, Francisco
Subject: EPA RESPONSE----Pfizer's July 30 PSD Non-applicability Request: PFIZER, Barceloneta's
Attachments: EPA NONAPP LETTER-SEPT23-2015.pdf

An advance copy of EPA's Non-App Response is attached. FYI

From: Ocasio, Aileen [mailto:Aileen.OcasioAlvarez@pfizer.com]
Sent: Tuesday, September 01, 2015 9:43 AM
To: Dholakia, Umesh <Dholakia.Umesh@epa.gov>
Cc: Esquilin, Jorge <jorge.esquilin@pfizer.com>; Nunez, William E <william.e.nunez@pfizer.com>; Leimarys Delgado Medero <LeimarysDelgado@jca.pr.gov>; Angel Morales Cadiz <AngelMorales@jca.pr.gov>; Frontanes, Ramon <Ramon.Frontanes@Pfizer.com>; Bonano-Umpierre, Orlando <Orlando.Bonano-Umpierre@pfizer.com>; Claudio, Francisco <Claudio.Francisco@epa.gov>
Subject: Pfizer's July 30 PSD Non-applicability Request: PFIZER, Barceloneta's RESPONSE TO AUGUST 24, 2015 Email
Importance: High

Umesh, Good Day !

As agreed, after sending this email I'll call you to assure you received it and not the junk mail . ☺ Following are the responses to your recent (24-AUG-2015) email. Please do not hesitate to call me at 787-402-5227. Saludos, Aileen

1. In 1994- Pfizer was a major existing source because of two existing Superior Package boilers. Pfizer's 1994 submittal- Table 3-3- provides baseline actual emissions- SO₂ @ 114.5 t/y and NO_x @ 25.62 t/y.

- a. Was the facility major solely for SO₂ PTE (and its actual emissions)?

No, Pfizer-Barceloneta was a major source due to SO₂ and VOC emissions. The PTE and actual emissions for both, SO₂ and VOC, were above 100 tons per year.

- b. What was the PTE for NO_x and SO₂ for these 2 boiler packages?

The potential emissions for the Superior Boilers are presented below:

Superior (Model N) Steam Generator Boilers

Fuel	Heat Input (MMBtu/hr)	Criteria Pollutants Emission Factors (lb/1000 gal) ^{#1}	
		NO _x	SO ₂ ^{#2}
Fuel No. 6	16.5	55.00	315.6

Potential Emissions

Boiler	Maximum Fuel Consumption (gal/yr.) #3	Criteria Pollutants Emissions (lb/yr) #4	
		NOx	SOx
Boiler 1	963600	52998	304083
Boiler 2	963600	52998	304083
Emissions (ton/yr.) #5		53.0	304.1

Notes:

#1 Emission factors from AP-42's Table 1.3-1. "Criteria Pollutant Emission Factors for Fuel Oil Combustion".

#2 Emission factor for SO₂ is 157S lb/1000 gal. S = Sulfur wt% of fuel oil. For calculation purposes Pfizer assumed the maximum value for sulfur content allowed in the air permit (2.01 %wt Sulfur) for the Superior Boilers.

#3 Maximum Fuel Consumption (gal/yr.) = Max fuel rate (gal/hr) * 8760 (hr/yr.) = 110*8760 = 963600 gal/yr.

#4 Emissions (lb/yr.) = Emission factor (lb/1000 gal) * Fuel Consumption (gal/yr.) / 1000

#5 Emissions (ton/yr.) = Emissions (lb/yr.) / 2000 (lb/ton)

c. Both these boiler packages have been removed- as stated in your letter- correct?

It is correct, Pfizer-Barceloneta removed these two (2) boilers after the new Utility Plant started operations.

2. The 2002 Construction Permit has two NOx limits- why? (Condition 23 and 27) Which limit Pfizer is complying with?

The 90 tpy limit in **Condition 23** was imposed in 2002 for the purpose of establishing the plant's PTE at less than the 100 tpy major stationary source threshold for both PSD and Title V purposes. It applies to all units at the plant, as established by **Condition 24**. The 56 tpy limit in **Condition 27** dates from 1995, at which time the facility was a major stationary source. It applies only to the equipment installed as part of the Utility Plant Expansion Project and was imposed in order to ensure this project would not be a major modification subject to PSD permitting. This limit, although no longer necessary, was not deleted when the facility became a synthetic minor source in 2002. Pfizer complies with both of these limits. Also, please refer to responses offered to questions # 6 and # 7 - August 18, 2015's email.

3. Please list units in pre-1994, post 1995 non-app, 2002 construction permit and 2015 proposal that emitted or will emit NOx and SO2. Is there a thermal oxidizer on site? Any additional NOx and/or SO2 emitting unit- other than the usual combustion units?

The lists of units requested are presented below:

Pre-1994	
Unit	Capacity
Superior Boiler 1	400 hp / 16.5 MMBtu/hr
Superior Boiler 2	400 hp / 16.5 MMBtu/hr
Diesel Fire Pump 1 Cummins NT-280-IF	255 hp

Diesel Fire Pump 2 Cummins NT-280-IF	255 hp
Diesel Fire Pump 3 Cummins NT-280-IF	255 hp
Diesel Fire Pump 4 Aurora 8-481-17B	255 hp

Post-1995 PSD Non App.	
Unit	Capacity
Diesel Engine 1	2289 hp
Diesel Engine 2	2290 hp
Diesel Engine 3	2291 hp
Diesel Engine 4	2292 hp
Diesel Engine 5	2293 hp
Heat Recovery Steam Generator	36 MMBtu/hr
Packaged Boiler	36 MMBtu/hr
Diesel Fire Pump 1 Cummins NT-280-IF	255 hp
Diesel Fire Pump 2 Cummins NT-280-IF	255 hp
Diesel Fire Pump 3 Cummins NT-280-IF	255 hp
Diesel Fire Pump 4 Aurora 8-481-17B	255 hp

2002 Construction Permit and Amendments	
Unit	Capacity
Diesel Engine 1	2289 hp
Diesel Engine 2	2289 hp
Diesel Engine 3	2289 hp
Diesel Engine 4	2289 hp
Diesel Engine 5	2289 hp
Heat Recovery Steam Generator	36 MMBtu/hr
Packaged Boiler ^a	36 MMBtu/hr
Diesel Power Generator ^b	100 hp
Diesel Fire Pump 1 Aurora 8-481-17B	255 hp
Diesel Fire Pump 2 Aurora 8-481-17B	255 hp
Diesel Fire Pump 3 Aurora 8-481-17B	255 hp

Diesel Fire Pump 4 ^c Aurora 8-481-17B	255 hp
Thermal Oxidizer 1 ^d	0.7 MMBtu/hr
Thermal Oxidizer 2 ^e	0.1 MMBtu/hr
Thermal Oxidizer 3 ^e	0.1 MMBtu/hr
Gasoline Power Generator ^{b, c}	100 hp
Gasoline Power Generator 1 ^c	14 hp (max)
Gasoline Power Generator 2 ^c	14 hp (max)
Gasoline Power Generator 3 ^c	14 hp (max)
Diesel Power Generator 1 ^c	845 hp (max)
Diesel Power Generator 2 ^c	845 hp (max)
Diesel Power Generator 3 ^c	845 hp (max)
Diesel Power Generator 4 ^c	845 hp (max)
Diesel Power Generator 5 ^c	845 hp (max)
Diesel Power Generator 6 ^c	845 hp (max)
Diesel Power Generator 7 ^c	845 hp (max)

^a Packaged Boiler approved to operate with LPG. Air Permit PFE-09-0301-0544-I-II-C (April 2014)

^b Permit PFE-01-09-1007-0035-I-II-C (April 2008)

^c These units listed in the construction permit, but not installed or operated in Pfizer-Barceloneta.

^d Permit PFE-09-0301-0544-I-II-C (January 2010)

^e Permit PFE-09-0301-0544-I-II-C (April 2012)

2015	
Unit	Capacity
Diesel Engine 1	2289 hp
Diesel Engine 2	2289 hp
Diesel Engine 3	2289 hp
Diesel Engine 4	2289 hp
Diesel Engine 5	2289 hp

Heat Recovery Steam Generator	36 MMBtu/hr
Packaged Boiler ^a	36 MMBtu/hr
Diesel Power Generator ^b	100 hp
Diesel Fire Pump 1 Aurora 8-481-17B	255 hp
Diesel Fire Pump 2 Aurora 8-481-17B	255 hp
Diesel Fire Pump 3 Aurora 8-481-17B	255 hp
Diesel Fire Pump 4 ^c Aurora 8-481-17B	255 hp
Thermal Oxidizer 1 ^d	0.7 MMBtu/hr
Thermal Oxidizer 2 ^e	0.1 MMBtu/hr
Thermal Oxidizer 3 ^e	0.1 MMBtu/hr
Modular Boiler 1 ^f	11.5 MMBtu/hr
Modular Boiler 2 ^f	11.5 MMBtu/hr
Modular Boiler 3 ^f	11.5 MMBtu/hr
Gasoline Power Generator ^{b, c}	100 hp
Gasoline Power Generator 1 ^c	14 hp (max)
Gasoline Power Generator 2 ^c	14 hp (max)
Gasoline Power Generator 3 ^c	14 hp (max)
Diesel Power Generator 1 ^c	845 hp (max)
Diesel Power Generator 2 ^c	845 hp (max)
Diesel Power Generator 3 ^c	845 hp (max)
Diesel Power Generator 4 ^c	845 hp (max)
Diesel Power Generator 5 ^c	845 hp (max)
Diesel Power Generator 6 ^c	845 hp (max)
Diesel Power Generator 7 ^c	845 hp (max)

^a Packaged Boiler approved to operate with LPG.

Air Permit PFE-09-0301-0544-I-II-C (April 2014)

^b Permit PFE-01-09-1007-0035-I-II-C (April 2008)

^c These units listed in the construction permit, but not installed or operated in Pfizer-Barceloneta.

^d Permit PFE-09-0301-0544-I-II-C (January 2010)

^e Permit PFE-09-0301-0544-I-II-C (April 2012)

^f Proposed boilers to replace HRSG.

From: Dholakia, Umesh [<mailto:Dholakia.Umesh@epa.gov>]

Sent: Monday, August 24, 2015 2:25 PM

To: Ocasio, Aileen

Cc: Esquilin, Jorge; Nunez, William E; Leimarys Delgado Medero; Angel Morales Cadiz; Frontanes, Ramon

Subject: RE: Pfizer's July 30 PSD Non-applicability Request: PFIZER, Barceloneta's RESPONSE

Good Day- Hello:

Please confirm or clarify the following-

1. In 1994- Pfizer was a major existing source because of two existing Superior Package boilers. Pfizer's 1994 submittal- Table 3-3- provides baseline actual emissions- SO₂ @ 114.5 t/y and NO_x @ 25.62 t/y. Was the facility major solely for SO₂ PTE (and its actual emissions)? What was the PTE for NO_x and SO₂ for these 2 boiler packages? Both these boiler packages have been removed- as stated in your letter- correct?
2. The 2002 Construction Permit has two NO_x limits- why? (Condition 23 and 27) Which limit Pfizer is complying with?
3. Please list units in pre-1994, post 1995 non-app, 2002 construction permit and 2015 proposal that emitted or will emit NO_x and SO₂. Is there a thermal oxidizer on site? Any additional NO_x and/or SO₂ emitting unit- other than the usual combustion units?

If you need the copies of 1994 submittal Tables 3-1 to 3-4, please let me know.

Please call me at (212) 637-4023 if you would like to clarify my questions.

Umesh Dholakia

From: Ocasio, Aileen [<mailto:Aileen.OcasioAlvarez@pfizer.com>]

Sent: Tuesday, August 18, 2015 9:57 AM

To: Dholakia, Umesh

Cc: Esquilin, Jorge; Nunez, William E; Leimarys Delgado Medero; Angel Morales Cadiz; Frontanes, Ramon

Subject: Pfizer's July 30 PSD Non-applicability Request: PFIZER, Barceloneta's RESPONSE

Importance: High

Good day !

Please find the response to your questions. Also, including Eng. Leimarys Delgado and Angel Morales from the Environmental Quality Board (EQB) – Air Division that are preparing the construction permit for the three(3) MIURA boilers.

- 1) Pfizer was never and is currently not a major source for a PSD permit. True?

At the time Pfizer submitted a PSD non-applicability determination to Environmental Protection Agency (EPA) for the 1994 Utility Plant Expansion Project, the Barceloneta site was a major source for criteria pollutants. The EPA agreed that the project would not require a PSD permit provided that the Puerto Rico Environmental Quality Board (EQB) incorporated certain operating conditions required by EPA into a construction permit. Please refer to **Attachment # 1** - November 30, 1995 letter from the EPA.

- 2) Pfizer was never and is currently not a major source for a title V permit. True?

Pfizer was a major source for criteria pollutants and HAPs but it has limited emissions of criteria pollutants and HAPS emissions through federally enforceable conditions established in EQB construction permits issued prior to the initial compliance date of the Pharmaceutical MACT, i.e. prior to October 21, 2002.

- 3) Did Pfizer have to comply with the Pharma MACT as a major HAP source? Did Pfizer apply for a title V permit?

As noted in the answer to question 2, the site became a synthetic minor for HAP emissions prior to the initial compliance date of the Pharmaceutical MACT., i.e., prior to October 21, 2002. Pfizer did apply for a Title V permit a few years prior to becoming a synthetic minor for HAPs but withdrew its application for a Title V permit at or about the time it was issued a construction permit that resulted in the site becoming a synthetic minor for all pollutants. More recently, the site made a timely application for a Title V permit that became a new site requirement because of the applicability of 40 CFR Part 63, Subpart VVVVVV.

- 4) It seems that the Construction Permit was revised in 2006 – can you send me a copy of the 2006 or the latest PR Construction permit which lists the Conditions that need revisions?

The conditions that need revisions are related to the operation of the cogeneration engines, the Heat Recovery Steam Generator (HRSG) and the Packaged Boiler. These are conditions 26 to 48 in Pfizer's synthetic minor source permit issued by the EQB on October 2, 2002, and these have not change. The conditions that were revised in 2006 did not pertain to the Utility Plant. Please refer to **Attachment # 2** for a copy of the 2002 permit.

- 5) Does the latest Construction Permit state Pfizer as a SM source and lists PTE for the criteria pollutants- which are below the PSD major source thresholds? Are they also below Title V thresholds?

The latest construction permit states that Pfizer is a Synthetic Minor source and lists the following potentials to emit criteria pollutants in condition 23. (**Attachment # 2**)

Criteria Pollutant Regulated	Emissions Rates Permitted (ton/year)
PM-10	90
SO ₂	90
NO _x	90
CO	90
VOC (Including HAP classified as VOC)	90
Lead	9.5

Yes, the site is below PSD's and Title V's threshold limits.

6) Why does Pfizer need to increase NOx PTE from 56 to 90 tons/year?

The site currently has a 90 tons/year limit for NOx in its Synthetic Minor Source Operating Permit. Enabling the new boilers to operate up to the 90 ton/year limit will provide the site with important operational flexibility while maintaining site wide emissions limit of 90 tons/year. Based on current site operations and synthetic minor source status, it is no longer necessary to have a specific limit apply only to these boilers when the site is required to stay below 90 tons/year for all operations.

7) Why NOx is limited to 56 tpy and not 90 tpy like other pollutants?

The limit of 56 tpy was specific to 1994 Utility Plant Expansion project was agreed to with the EPA as appropriate to avoid the PSD permitting for the engines and boilers installed at the time of the 1994 Utility Plant Expansion project. As part of the overall project, two (2) existing steam boilers were decommissioned and dismantled and the past actual emissions from these two boilers were credited to the new project equipment installed, limiting the net emission increase from the project to below the 40 ton per year PSD NOx de minimis level. Please refer to condition 2 of the EPA's November 30, 1995 letter (**Attachment # 1**).

If you have additional questions you can reach me at 787-402-5227 (aileen.ocio@pfizer.com) or Jorge Esquilín (jorge.equilin@pfizer.com) at 787-565-0743.

Saludos,

Aileen Ocasio

Aileen Ocasio
Director/TL Environmental, Health and Safety



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From: Dholakia, Umesh [<mailto:Dholakia.Umesh@epa.gov>]
Sent: Thursday, August 13, 2015 8:42 AM
To: Ocasio, Aileen
Cc: Esquilin, Jorge
Subject: RE: Pfizer's July 30 PSD Non-applicability Request

Ok. It is also unclear to me why NOx is limited to 56 t/y- and not 90 t/y like other pollutants? This is a 1994 determination so it will need some file searching for us and you. Thanks.

From: Ocasio, Aileen [<mailto:Aileen.OcasioAlvarez@pfizer.com>]
Sent: Wednesday, August 12, 2015 1:25 PM
To: Dholakia, Umesh
Cc: Esquilin, Jorge

Subject: RE: Pfizer's July 30 PSD Non-applicability Request

Importance: High

Good day, it is to let you know that your email was received. Thanks, Aileen Ocasio

Aileen Ocasio

Director/TL Environmental, Health and Safety



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Email: aileen.ocasio@pfizer.com

From: Dholakia, Umesh [<mailto:Dholakia.Umesh@epa.gov>]

Sent: Wednesday, August 12, 2015 11:31 AM

To: Esquilin, Jorge; Ocasio, Aileen

Subject: Pfizer's July 30 PSD Non-applicability Request

Hello:

In order to review Pfizer's request for a PSD non-app, please let me know or confirm the following:

- 1) Pfizer was never and is currently not a major source for a PSD permit. True?
- 2) Pfizer was never and is currently not a major source for a title V permit. True?
- 3) Did Pfizer have to comply with the Pharma MACT as a major HAP source? Did Pfizer apply for a title V permit?
- 4) It seems that the Construction Permit was revised in 2006 – can you send me a copy of the 2006 or the latest PR Construction permit which lists the Conditions that need revisions?
- 5) Does the latest Construction Permit state Pfizer as a SM source and lists PTE for the criteria pollutants- which are below the PSD major source thresholds? Are they also below title V thresholds?
- 6) Why does Pfizer need to increase NOx PTE from 56 to 90 tons/year?

Thanks.

Umesh Dholakia
(212) 637-4023